



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,831	04/06/2001	Hiroyoshi Kamoda	0965-0348P	5091

2292 7590 09/09/2003

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

CULLER, JILL E

ART UNIT PAPER NUMBER

2854

DATE MAILED: 09/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/826,831

Applicant(s)

KAMODA, HIROYOSHI

Examiner

Jill E. Culler

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on April 6, 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1 and 3-5 are objected to because of the following informalities:

In claim 1, on line 20, "said plurality of transport cylinders" has no antecedent basis. It appears that this may have been overlooked when the preceding claim language was amended.

In claim 6, on line 10, the recitation of a "second space formed below the first transport cylinder" appears to contradict the drawings, which indicate the space formed below the second transport cylinder and beside the first transport cylinder.

Appropriate correction and/or clarification is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP01316268 to Funada in view of U.S. Patent No. 4,448,121 to Uno et al. and U.S. Patent No. 6,192,140 to Reinhard et al.

With respect to claims 1 and 6, Funada shows a double-sided printing machine comprising: a printing unit, 1, for printing opposite faces of a sheet-like material; ink supply means for supplying ink to said printing unit, 35, 36, said ink supply means being

supported to be brought into contact with and separated from said printing unit, see Fig. 2; and transport means, 22, for transporting said sheet-like material from said printing unit while holding said sheet-like material,

Funada does not teach a delivery pile provided downstream of the printing unit for collecting the sheet-like material, or that the transport means includes a first delivery chain passing through a lower side of the ink supply means, a first transport cylinder and a second transport cylinder provided adjacent to the delivery pile and arranged in a zigzag fashion with respect to a vertical direction, for transporting the sheet-like material from the first delivery chain, and a second delivery chain for transporting the sheet-like material from the transport cylinders; first detection means for detecting a status of printing on one face of the sheet-like material when the sheet-like material is transported by the first transport cylinder; and second detection means for detecting a status of printing on the other face of the sheet-like material when the sheet-like material is transported by the second transport cylinder.

Uno et al. teaches a delivery pile, 31, provided downstream of the printing unit for collecting the sheet-like material, see column 4, lines 65-68, and transport means including a first delivery chain, 20, a first transport cylinder, 12, and a second transport cylinder, 13, arranged in a zigzag fashion with respect to a vertical direction, for transporting the sheet-like material from the first delivery chain and a second delivery chain, 10, for transporting the sheet-like material from the transport cylinders, a first detection means, 15, for detecting a status of printing on one face of the sheet-like material when the sheet-like material is transported by the first transport cylinder, 12,

and second detection means, 16, for detecting a status of printing on the other face of the sheet-like material when the sheet-like material is transported by the second transport cylinder, 13. See Fig. 1 in particular.

Reinhard et al. teaches a first transport cylinder, 17, with a first detection means, 34, and a second transport cylinder, 18, with a second detection means, 36, provided adjacent to a delivery pile, 4, 6, 7. See Figure 1 in particular.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the printing unit of Funada using the transport means and quality inspection apparatus of Uno et al., located adjacent to the delivery pile, as taught by Reinhard et al., in order to be able to inspect the quality of the printed sheets while transporting them from the printing unit to the delivery pile.

With respect to claims 3 and 7, Funada does not teach that the first and second transport cylinders are suction cylinders.

Reinhard et al. teaches the use of suction cylinders to transport sheets in a printing machine. See column 2, lines 37-39 and 47-50.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the invention of Funada using the suction cylinders of Reinhard et al. in order to better control the transport of the sheets.

With respect to claim 8, Funada does not teach that the first detection means includes a first spotlight and the second detection means includes a second spotlight.

Reinhard et al. teaches a first detection means including a first spotlight, 32, and a second detection means including a second spotlight, 33. See column 3, lines 4-11.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the invention of Funada using the spotlights of Reinhard et al. in order to be able to inspect the printed sheets with better lighting.

4. Claims 4-5 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funada in view of Uno et al. and Reinhard et al. as applied to claims 1, 3 and 6-8 above, and further in view of U.S. Patent No. 4,794,856 to Giori.

With respect to claims 4-5 and 9, Funada, Uno et al. and Reinhard et al. teach all that is claimed, as in the above rejection of claims 1, 3 and 6-8 except that a first drying means is provided on the upstream side, with respect to the transport direction, of a detection position at which said first detection means detects the sheet-like material held by the first transport cylinder and a second drying means is provided on the upstream side, with respect to the transport direction, of a detection position at which the second detection means detects the sheet-like material held by the second transport cylinder, wherein the first drying means is disposed to face the first transport cylinder and the second drying means is disposed to face the second transport cylinder.

Giori teaches a drying means disposed to face a transport cylinder.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the invention of Funada using the drying means of Giori

on each transport cylinder in order to be able to dry the printed material before it is inspected, minimizing the chance of smudging during or after inspection.

With respect to claim 10, Funada, Uno et al., Reinhard et al. and Giori teach all that is claimed as discussed in the above rejections.

Response to Arguments

5. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2854

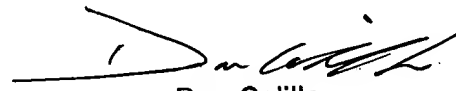
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill E. Culler whose telephone number is (703) 308-1413. The examiner can normally be reached on M-Th 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (703) 305-6619. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

jec



Dan Colilla
Primary Examiner
Art Unit 2854